U.S. Environmental Protection Agency Office of Pollution Prevention and Toxics

INTERPRETIVE GUIDANCE FOR THE FEDERAL PROGRAM TSCA SECTIONS 402/403

FINAL 12/15/99

Q/A(4) Documented methodologies; Home Test Kits "Work Practice Standards"

745.223 Definitions

"Adequate quality control" means a plan or design which ensures the authenticity, integrity, and accuracy of samples, including dust, soil, and paint chip or paint film samples. Adequate quality control also includes provisions for representative sampling.

"Documented methodologies" are methods or protocols used to sample for the presence of lead in paint, dust, and soil.

745.227 Work practice standards for conducting lead-based paint activities: target housing and child-occupied facilities.

(a)(3) Documented methodologies that are appropriate for this section are found in the following: The U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing; the EPA Guidance on Residential Lead-Based Paint, Lead-Contaminated Dust, and Lead-Contaminated Soil; the EPA Residential Sampling for Lead: Protocols for Dust and Soil Sampling (EPA report number 7474-R-95-001); Regulations, guidance, methods or protocols issued by States and Indian Tribes that have been authorized by EPA; and other equivalent methods and guidelines.

Various requirements in 745.227(b) Inspection, (c) Lead hazard screen, (d) Risk assessment, and (e) Abatement all state that analyses "to determine the presence of lead shall be conducted using documented methodologies which incorporate adequate quality control procedures".

Q1: Can an inspector or a risk assessor use a home test kit as a "documented methodology" to test for lead during an inspection, lead hazard screen, or risk assessment?

A1: No. EPA does not currently recommend home test kits for use by either homeowners or professionals for testing for lead in paint, dust, or soil. Studies conducted by EPA have shown that these chemical test kits cannot reliably discriminate between high and low levels of lead. Additionally, the 1997 revision of Chapter 7 of the HUD Guidelines recommends against the use of test kits for inspections, because chemical test kits do not currently produce results equivalent to X-ray fluorescence (XRF) or laboratory paint chip analysis. Therefore, home test kits would not be documented methodologies, because EPA and HUD specifically recommend against their use by professionals. Home test kits also do not incorporate adequate quality control as defined in 745.223 and as required by the work practice standards for sampling under different paragraphs of 745.227. Because of their lack of reliability, if chemical test kits

are covered in accredited courses, training providers should indicate that the test kits would not be considered documented methodologies. At this time, inspectors and risk assessors must not use home test kits when conducting lead-based paint activities.

HUD is funding research designed to improve chemicals test kits. In the future, if improved chemical test kits are developed, EPA and HUD may be able to recommend their use and they could be considered documented methodologies. After that time accredited training providers could then indicate that such test kits could be used as documented methodologies.